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STUDIES OF NEOTROPICAL COMPOSITAE–V. *MUNNOZIA ORTIZIAE* (LIABEAE), A NEW SPECIES FROM THE ANDES OF PASCO, PERU

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ABSTRACT

A new species, **Munnozia ortiziae Pruski** (Compositae: Liabeae: Munnoziinae), is described from the Andes of Pasco, Peru. It is most similiar to *M. oxyphylla*, also of Peru, in its pinnately veined, lanceolate to elliptic-lanceolate leaves and moderately large capitula in loose, open cymose capitulescences.

KEY WORDS: Andes, Asteraceae, Compositae, Liabeae, *Liabum*, *Munnozia*, Munnoziinae, Pasco, Peru.

Munnozia Ruiz & Pav. (Compositae: Liabeae: Munnoziinae) is an Andean-centered genus of more than 40 species (Robinson 1978, 1983). It was resurrected from synonymy of *Liabum* Adans. by Robinson and Brettell (1974) and differs from *Liabum* by black (vs. pale) anther thecae. A new species, *Munnozia ortiziae* Pruski, from the Andes of Pasco, Peru, is described herein. The new species appears most similar to *M. oxyphylla* (Cuatrec.) H. Rob., which is known from Huánuco and Pasco, Peru.

MUNNOZIA ORTIZIAE Pruski, sp. nov. **TYPE: PERU. Pasco.** Prov. Oxapampa. Dist. Oxapampa: La Suiza Nueva, open forest with many tree ferns, 10°38' S, 75°27' W, 2240 m, 21 Jun 2003, *H. van der Werff, R. Vásquez, B. Gray, R. Rojas, R. Ortiz, & N. Davila 17600* (holotype: MO; isotypes: AMAZ, F, HOXA, USM). Figures 1–5.

Plantae herbaceae perennes vel fruticosae usque ca. 2(–4) m altae; folia opposita petiolata, lamina lanceolata vel elliptico-lanceolata 5–11 cm longa 1–4(–6) cm lata chartacea pinnatim venosa supra virida saepe glabra subtus albo-grisea tomentoso-sericea; capitulescentia cymosa, pedunculi 4–12 cm longi; capitula radiata; involucrum campanulatum vel hemisphaericum; phyllaria subaequalia vel obgradata ca. 3-seriata 9–14 mm longa albo-grisea tomentoso-sericea; flosculi radii 24–36, corollis 24–27.5 mm longis; flosculi disci 40-50+, corollis 7–8 mm longis infundibuliformis; anthera niger; cypselae ca. 1 mm longae strigillosae; setae pappo ca. 6 mm longae.

Perennial herbs to shrubs to ca. 2(–4) m tall, branching opposite (trichotomous). **Stems** ascending to scandent, subterete or angled, loosely arachnoid-tomentose to sometimes subglabrous proximally. **Leaves** simple, opposite, petiolate; petiole 1–1.5 cm long, narrow, unwinged, slightly dilated and subconnate at base; blade lanceolate to elliptic-lanceolate, 5–11 cm long, 1–4(–6) cm wide, chartaceous, venation pinnate, secondary veins 7–10 per side, surfaces discolorous, adaxial surface green, glabrous or sometimes lingering arachnoid-tomentose, abaxial surface white-gray, tomentose-sericeous, trichomes fused, midrib and secondary veins visible but tertiary reticulation obscured by tomentum, base acute to broadly obtuse, margins entire to less commonly few crenulate-serrulate, apex acute to acuminate. **Capitulescence** few- to several-capitulate, open, cymose; peduncles 4–12 cm long, tomentose-sericeous or lingering arachnoid-tomentose. **Capitula** radiate, many-flowered; involucre campanulate to hemispherical; phyllaries subequal or obgradate, ca. 3-

Figure 1. *Munnozia ortiziae* Pruski. Photograph of a paratype (*van der Werff et al. 23417,* MO) showing the opposite discolorous leaves and subequal to obgradate tomentose-sericeous phyllaries.

seriate, lanceolate to elliptic-lanceolate, 9–14 mm long, white-gray, tomentose-sericeous with fused persistent (sometimes thinning but never subglabrate) trichomes or inner phyllaries sometimes arachnoid-tomentose; receptacle subpaleate, pseudopaleae ca. 2 mm long, lacerate-echinate. **Ray florets** 24–36, pistillate; corolla 24–27.5 mm, pale yellow, tube 3–3.5 mm long, limb lanceolate, 21–24 mm long, ca. 2 mm wide, 4-nerved; style well-exserted, subglabrous, branches ascending, linear, ca. 1.5 mm long, terete, stigmatic surfaces continuous. **Disk florets** bisexual, 40-50+; corolla funnelform, 7–8 mm long, 5-lobed, pale yellow, tube 3–3.5 mm long, narrow, usually shorter than limb, sparsely setose, limb 4–4.5 mm long, throat only slightly ampliate, 1–1.5 mm long, lobes lanceolate, ca. 3 mm long, noticeably longer than short throat, sparsely setulose with antrorse biseriate trichomes apically; anther thecae black, appendage triangular, stramineous; style shaft setulose distally, branches spreading, shortly elliptical, ca. 0.5 mm long, somewhat flattened, abaxially sparsely setulose, stigmatic surfaces continuous. **Cypselae** obconic, ca. 1 mm long, brown, strigillose; pappus bristles many, subequal, 2–3-seriate, ca. 6 mm long, pale brown, subentire or proximally scabridulous, reaching only to about midpoint of corolla lobes.

Paratypes. **PERU. Pasco. Prov. Oxapampa. Dist. Chontabamba:** Carretera Chontabamba a la Suiza, 2100 m, 11 Nov 2004, *Monteagudo et al. 7599* (HOXA, MO, USM + 2 unmounted duplicates for distribution); Sector La Suiza, 2211 m, 6 Dec 2004, *Monteagudo et al. 7876* (AMAZ, HOXA, MO, USM + 2 unmounted duplicates for distribution); La Suiza Nueva, 2240 m, 21 Jun 2003, *van der Werff et al. 17589* (HOXA, MO, USM +2 unmounted duplicates for distribution); La Suiza Nueva, 2210 m, 6 May 2005, *van der Werff et al. 19775* (HOXA, MO, USM + 2 unmounted duplicates for distribution); La Suiza Nueva, 2200 m, 17 Oct 2005, *Vilca & Rojas 492* (AMAZ, HOXA, MO, MOL, USM + 2 unmounted duplicates for distribution). **Dist. Huancabamba:** Parque Nacional Yanachaga Chemillén, Grapanazú, alrededor de la laguna San Daniel, 2366 m, 6 Sep 2006, *Castillo 346* (AMAZ, HOXA, MO, MOL, USM + 2 unmounted duplicates for distribution); Entre el Río cueva blanca y milpo, 2720 m, 18 Sep 2004, *Monteagudo et al. 7078* (HOXA, MO, USM); Sector Milpa, 3000 m, 1 Feb 2005, *Monteagudo & Francis 8040* (HOXA, MO, USM); Parque Nacional Yanachaga-Chemillén, cerca a la cordillera Yanachaga, 3330 m, 24 Apr 2007, *Monteagudo et al. 13801* (HOXA); Lanturachi, sector Santa Barbara, camino a Cueva Blanca, Remanente, 2813 m, 18 Oct 2004, *Perea et al. 789* (HOXA, MO, USM); Sector Grapanazú, 2400 m, 17 Oct 2003, *Rojas et al. 1929* (HOXA, MO, USM + 1 unmounted duplicate for distribution), same date and locality, *Rojas et al. 1977* (HOXA, MO, USM + 1 unmounted duplicate for distribution); Sector Oso Playa, Bosque montano (bofedal) sobre suelo arenoso, 2559 m, 13 Oct 2009, *Valenzuela et al. 13458* (MO + 2 unmounted duplicates for distribution). **Dist. Oxapampa:** Parque Nacional Yanachaga Chemillén, Cercanías del Refugio el Cedro, 2240 m, 27 Nov 2002, *Monteagudo et al. 4456* (HOXA, MO, USM); Parque Nacional Yanachaga Chemillén, Cercanías del Refugio el Cedro, 2200–2400 m, 6 Feb 2003, *Monteagudo et al. 4491* (HOXA, MO, USM); La Suiza, 2200 m, 10 Dec 2002, *Vásquez et al. 27750* (HOXA, MO, USM + 2 unmounted duplicates for distribution); Parque Nacional Yanachaga-Chemillén, Sector San Alberto, 2600 m, 14 Mar 2003, *Vásquez et al. 28023* (HOXA, MO, USM); La Suiza Nueva, 2200 m, 1 May 2003, *Vásquez et al. 28080* (MO); Parque Nacional Yanachaga-Chemillén, sector Chacos, 2219 m, 21 Jan 2004, *Vásquez et al. 28834* (HOXA, MO, USM). **Dist. not given on labels:** Palmazu, Cooperativo Navarra, 2000 m, 5 Mar 1986, *van der Werff et al. 8373* (MO); Laguna San Daniel, 2400 m, 8 Nov 2009, *van der Werff et al. 23416* (MO + 1 unmounted duplicate for distribution); Laguna San Daniel, 2400 m, 8 Nov 2009, *van der Werff et al. 23417* (MO).

Etymology. This beautiful new species is named for Dra. Rosa Ortiz (MO), co-collector of the type and a native Peruvian. Rosa Ortiz is a specialist in the taxonomy and phylogeny of Menispermaceae, so it is both appropriate and a pleasure to dedicate to her this new (ascending to) scandent species.

Figure 2. *Munnozia ortiziae* Pruski. Distal portion of stem showing the discolorous leaves and the subequal to obgradate, tomentose-sericeous phyllaries (*Castillo 346*).

Figure 3. *Munnozia ortiziae* Pruski. Habit (*Monteagudo et al. 13801*).

Figure 4. *Munnozia ortiziae* Pruski. Close-up of two capitula (*Monteagudo et al. 13801*).

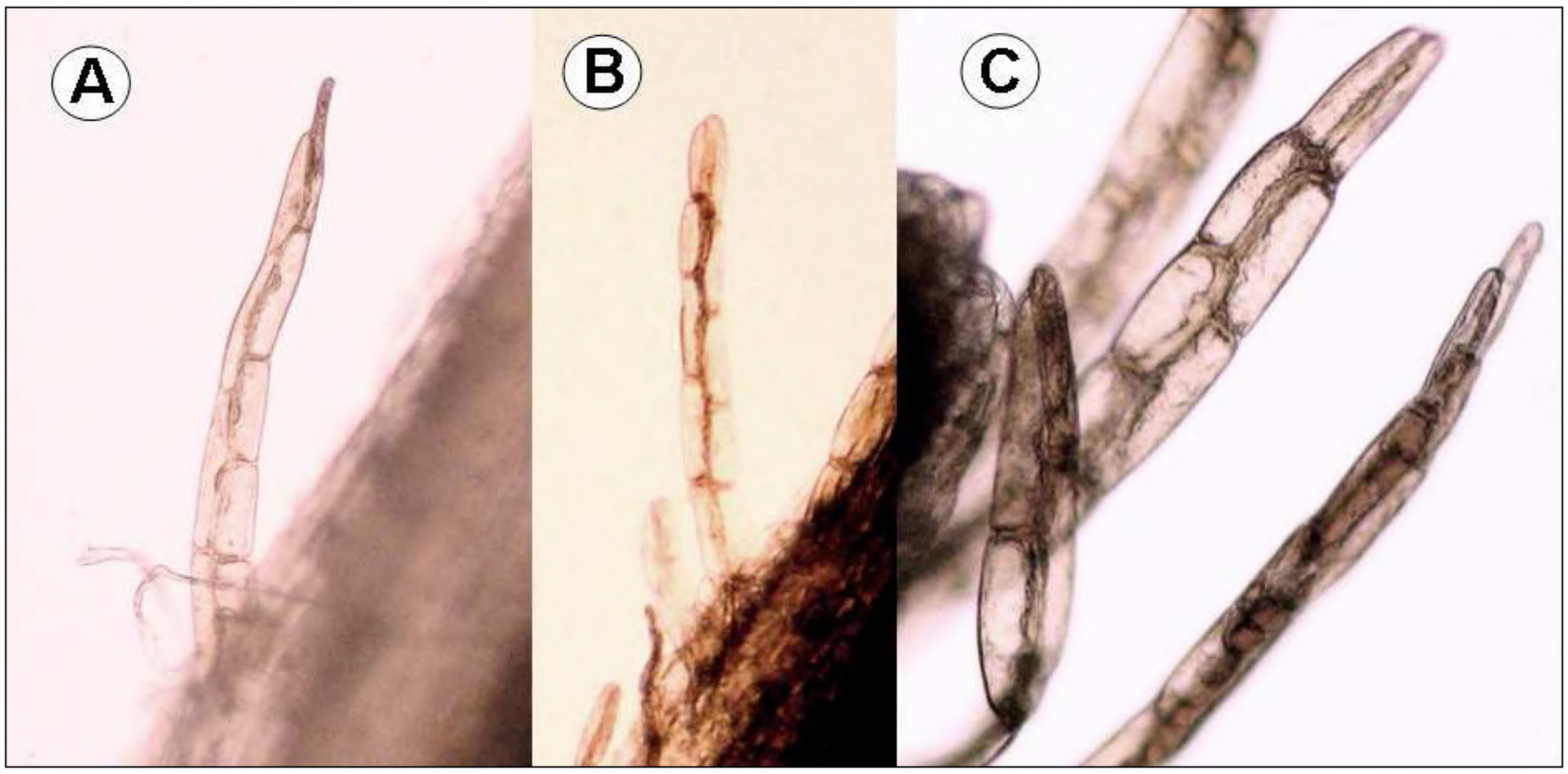

Figure 5. A–C. *Munnozia ortiziae* Pruski. Biseriate trichomes of disk corollas (*van der Werff et al. 17600*).

Distribution and ecology. This apparently locally common species is endemic to Prov. Oxapampa in Pasco, Peru, where it has been collected in low forests and disturbed areas from 2000–3330 meters elevation in several districts.

Munnozia ortiziae is most similar to the Peruvian *M. oxyphylla* of sect. *Munnozia* — both species have pinnately veined, lanceolate to elliptic-lanceolate leaves and moderately large capitula in loose, open cymose capitulescences. *Munnozia ortiziae* clearly differs from *M. oxyphylla* by its subequal or obgradate (vs. gradate), tomentose-sericeous (vs. glabrous to lingering arachnoid) phyllaries that are 9–14 (vs. 6–7) mm long, by generally more numerous ray florets, and by funnelform (vs. campanulate) disk corollas with tube shorter (vs. longer) than limb.

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